



# Best Management Practices for Construction and Development Projects

## Niangua Darter

*Etheostoma nianguae*

**Common name** • Niangua Darter  
**Scientific name** • *Etheostoma nianguae*  
**Federal status** • Threatened  
**State status** • Endangered

### Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended as a guide to manage habitat for a given species. Please contact the Department of Conservation if habitat management information is needed. Because every project and location differ, following the recommendations in this document does not guarantee impacts will not occur to the species and additional information may be required in certain instances. Following the recommendations in this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

### Ecology

Niangua Darters are found only in south central Missouri. They inhabit clear upland creeks and small- to medium-sized rivers with slight to moderate currents. They require continuously flowing streams with silt-free gravel bottoms. Niangua Darters are found most of the year in shallow pools, margins, and stream runs. Prior to spawning, they move from pools and slow runs to gravel riffles. The spawning season extends from mid-March to early June, but most of the breeding occurs during April. Adults are commonly 2.6-4.4 inches in length. Niangua Darters eat the nymphs of stoneflies and mayflies and other aquatic insects.

### Reasons for Decline

The Niangua Darter has never been abundant or widespread in distribution. Although historically it occurred in several rivers throughout south-central Missouri, most populations have experienced declines, particularly in upstream reaches, and some populations may be lost. Declines in Niangua Darter numbers are primarily associated with habitat loss from reservoir construction and poorly-designed road crossings, stream channelization, and increased sediment in streams. Current threats to Niangua Darters include improper and untimely gravel and sand removal, loss of stream bank vegetation, fertilizer and pesticide run-off, and excessive additions of nutrients to streams from livestock and human wastes.

### Specific Recommendations

The Niangua Darter is a valuable indicator species because it appears to be sensitive to changes in stream habitat. Local Niangua Darter populations are quick to respond to stream degradation, especially increases in silt and nutrient loads. Practices that stabilize and improve Niangua Darter habitat will benefit numerous other aquatic species.

- Project activities should not occur below the high bank of the stream between March 15 and June 15.
- Low water road crossings on streams should be designed to facilitate aquatic organism passage and sediment transport. Dams and impoundment structures should not be constructed in streams where this species occurs.
- Erosion and sediment controls should be implemented, monitored, and maintained in general and for the duration of temporary projects.
- Bank stabilization materials should consist only of rock, clean broken concrete or similar materials free of pollutants, silt, and extraneous debris including exposed rebar.

### General Recommendations

Refer to *Best Management Practices for Construction and Development Projects Affecting Missouri Rivers and Streams*.

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or the [Missouri Department of Transportation Environmental Studies webpage](#) for additional information on recommendations.

### Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

For species information:

[Missouri Department of Conservation](#)  
Science Branch  
P.O. Box 180  
Jefferson City, MO 65102-0180  
Telephone: 573-751-4115

For species information and Endangered Species Act  
Coordination:

[U.S. Fish and Wildlife Service](#)

Ecological Services  
101 Park Deville Drive, Suite A  
Columbia, MO 65203-0007  
Telephone: 573-234-2132

For Clean Water Act Coordination:

[Missouri Department of Natural Resources](#)

Water Protection Program  
P.O. Box 176  
Jefferson City, MO 65102-0176  
Telephone: 573-751-1300, 800-361-4827

[U.S. Army Corps of Engineers](#)

Regulatory Branch  
700 Federal Building  
Kansas City, MO 64106-2896  
Telephone: 816-389-3990

[U.S. Environmental Protection Agency](#)

EPA Region 7 Water Division  
11201 Renner Boulevard  
Lenexa, KS 66219  
Telephone: 913-551-7977

## **Disclaimer**

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors, and others to provide guidance to those who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Federal laws such as the Clean Water Act and the Endangered Species Act, and state or Local laws need to be considered for construction and development projects and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.